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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,598	09/16/2003	Gerald Winton Lankford	555255012542	3266

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EXAMINER

KARIKARI, KWASI

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,598

Applicant(s)

LANKFORD, GERALD WINTON

Examiner

Kwasi Karikari

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19/16/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/16/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/20/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 09/30/2005 have been fully considered but they are not persuasive.

a) In response to applicant's argument that the processor 4 in Sanchez's reference fails to teach the functions of the detector in claim 1, the Examiner still respectfully maintains that the processor 4 performs similar functions as the detector.

(see Pars. [0005] and [0045], processing means have been provided which detect out all of the information, through the gateway, the entrance/exit signaling parameters of a terminal in a foreign network...each terminal is in...).

b) In response to applicant's argument that the processor 4 and analyzer 6 in Sanchez reference fail to overcome the functions of the associator, as amended in claim 1, the Examiner still maintains that the integration of the processor 4 and analyzer 6 meets the limitation of the associator (see Pars. [0006], [0029] and [0032-35] the analysis means are connected to a real time service module 8 which is informed every time an entrance/exit of a terminal in a foreign network is detected, for immediately providing service in a foreign network...).

c). And, in response to applicant's argument that the database 7 in Sanchez's reference fails to teach a roaming network table indicating roaming relationships, the Examiner still concludes that the database 7 provides the limitation of the storage in claim 1 (see Pars. [0041-0044] and [0049-55], it is also worth mentioning that the database incorporates a log table containing all the networks visited by each client...).

In view of the above, the rejections using Sanchez and Aerrabatu are proper and maintained as set forth below. These rejections are made FINAL.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 09/20/2004 is in compliance with the provision of 37 CFR 1.97, has been considered by the Examiner, and made of record in the application file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1,2,4-6,9-11,13,14 and 16-20 are rejected under U.S.C. 102(e) as being unpatentable over Sanchez Ferreras et al., (U.S. 20050118998 A1),

(hereinafter Sanchez).

Regarding **claims 1 and 13**, Sanchez discloses an apparatus for a communication system having multiple portions, said apparatus comprises:

a detector (processor 4 detects and reads all the information that passes through it, see Pars. [0005] and [0045]) adapted to receive values of positional information associated with mobile nodes (mobile network can detect mobile terminals, see Par. [0017]), during operation thereof to communicate by way of network portions (HLR, VLR and gateway 2) in whose coverage area that the mobile nodes, respectively, are positioned said detector configured to form indications of the values of the positional information (processor 4 continuous reads information exchange, see Par. [0025]);

an associator adapted to receive the indications formed by said detector of the values of the positional information (analyzer 6, collects information, analyzes information of a location changes, see Par. [0006 and 0029]), said associator configured to associate position of each of the mobile nodes with corresponding network portions (the information are report such that terminals can obtain service while they are in foreign network, see Pars. [0023-25] and [0029]), respectively, through which communication are effectuated, thereby to identify roaming relationship between each of the mobile nodes and the corresponding network portion when the mobile nodes are roaming (foreign networks) and

a storage element coupled to said associator, said storage element configured to store values representative of associations formed by said associator, the values together forming a roaming network table indicating the roaming relationships (the database 7 has information of which subscribers are located in a foreign network, Par. [0026] and the database incorporates a log table which could be updated with a each network change, Pars. [0041-42, 0012 and 0033]).

Regarding **claims 2 and 14**, Sanchez discloses the apparatus of claims 1 and 15 wherein each mobile nodes (mobile terminals, see Par. [0017 and 0025]) has an identifier (subscriber's profile, see Pars. [0021 and 0043]) associated therewith and wherein said detector is further adapted to receive the identifier and for detecting values thereof (processor 4 continuous reads information exchange, see Par. [0025]).

Regarding **claims 4 and 16**, as recited in claims 3 and 15, Sanchez teaches the apparatus/method wherein at least the portion of the IMSI number (MSISDN which correspond to the mobile telephone number, see Par. [0043]) includes a Mobile Network Code (MNC) (the country code of the network in which it is located, see Par. [0043]), the Mobile Network Code identifying a home network portion associated with each mobile (mobile terminals, see Par. [0017 and 0025]) node; the home network portion of the multiple network portions (consultation is made at the HLR and VLR when the subscriber enter into a new network, see Par. [0037]).

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Regarding **claims 5 and 17**, as recited in claims 3 and 15 Sanchez disclose apparatus/method wherein the IMSI number (MSISDN which correspond to the mobile telephone number, see Par. [0043]) includes a Mobile Country Code (MCC) and wherein the at least the portion of the IMSI number of which said detector detects the values comprises the Mobile Country Code; and at least the portion of the IMSI number comprises a mobile country code (the country code of the network in which it is located, see Par. [0043]).

Regarding **claims 6,9 and 18**, Sanchez discloses an apparatus as recited in claims 1 and 15, wherein each node registers with a network portion of the multiple network portions (HLR, VLR and gateway 2) at selected times (location update every time mobile terminal changes location, see Page 2, line [0021]) and wherein the positional information detected by said detector is communicated by each mobile node (mobile terminals, see Par. [0017 and 0025]) pursuant to registration with the network part; the roaming network table further includes an indication of a time at which the values representative of the associations are stored at said storage element; and the roaming table further comprises identifying times at which values are entered thereat (table contains date of the last location update, see Pars. [0018, 0020-23, 0043-45 and 0049]).

Regarding **claim 10**, as recited in claim 9, Sanchez discloses a roaming network table further includes and indication of time at which the values representative of the

associations are stored at said storage element (subscriber's entry and exit information at the network are periodically eliminated/updated from the log table, see Par. [0055]).

Regarding **claim 11**, as recited in claim 10, Sanchez discloses wherein said roaming entry deleter deletes values of the roaming network (foreign network) table stored thereat for longer than a selected time period (subscriber's entry and exit information at the network are periodically eliminated from the log table, see Pars. [0013 and 0055]).

Regarding **claim 19**, recited in claim 18, Sanchez discloses the operations of accessing the roaming network table and determining t in which of the first and at least second network portions that the mobile node, associated with the home network portion, can communicate when roaming beyond the home-network portion (see Page 3, lines [0032-0036]).

Regarding **claim 20**, as recited in claim 13, Sanchez discloses the operation of deleting values out of the roaming network table after a selected time (subscriber's entry and exit information at the network are periodically eliminated from the log table, see Pars. [0013 and 0055]).

4. Claims 3, 15 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanchez as applied in view of Aerrabotu et al., (U.S. 20040190522 A1), (hereinafter Aerrabotu)

Regarding **claims 3 and 15**, as recited in claims 2 and 14, Sanchez teaches mobile terminals, (see Par. [0017 and 0025]), but fails wherein the radio communication system comprises a cellular radio communication system that provides for GPRS (General Packet Radio Service).

Aerrabotu teaches that the International Mobile Subscriber Identity (IMSI) is used as the mobile station identity in GPRS attach procedure when the mobile station does not have a SIM in a packet-switched data domain (see Pars. [0010] and [0014] respectively).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Aerrabotu with Sanchez's system in achieving a packet-switched data domain that enables call connection between mobile station and the network.

Regarding **claim 7**, as recited in claim in claim 1, Sanchez teaches mobile terminals (see Par. [0017 and 0025]), but fails to disclose wherein communications of the mobile node are formatted into messages, the messages having header parts, and wherein the positional information detected by said detector is embodied in the header parts of the messages.

Aerrabotu teaches an incoming call IP address for device and the regulating packet flow which is use for Internet messaging subsystem (see Par. [0016])

It would therefore have been obvious to one of the ordinary skill in the art to combine the teachings' of Aerrabotu with Sanchez's system in achieving a wireless communication system that is capable of providing Internet messaging in a packet switched data domain.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Froula (U.S. 6,356,767) teaches a method and apparatus for controlling mobile access to a wireless communication system.

AMIN et al., (U.S. 20020086671 A1) teaches a roaming authorization system

Dufva et al. (U.S. 20040087315 A1) teach a location services interworking with intelligent network.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571- 272 5905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwasi Karikari
Patent Examiner.


CHARLES APPIAH
PRIMARY EXAMINER